

U. S. PLANT PATENT APPLICATION OF

WENDY R. BERGMAN

FOR: CHRYSANTHEMUM PLANT NAMED

‘YELLOW YOMANKATO’

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TITLE: CHRYSANTHEMUM PLANT NAMED 'YELLOW
YOMANKATO'

APPLICANT: WENDY R. BERGMAN

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

5 *Chrysanthemum X morifolium* cultivar Yellow Yomankato

BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of
Chrysanthemum plant, botanically known as *Chrysanthemum X*
morifolium and hereinafter referred to by the name 'Yellow
10 Yomankato'.

The new Chrysanthemum is a product of a planned breeding
program conducted by the Inventor in Fort Myers, Florida. The
objective of the program is to create or discover new potted
Chrysanthemum cultivars that are suitable for year-round production
15 with uniform plant growth habit, good vigor and strong branching habit,
numerous inflorescences, desirable inflorescence form and floret colors,
fast and uniform flowering response, and good postproduction
longevity.

The new Chrysanthemum is a naturally-occurring whole plant
20 mutation of the Chrysanthemum cultivar Yomankato, disclosed in U.S.
Plant Patent number 13,057. The new Chrysanthemum was discovered

BERGMAN, Wendy R.

and selected by the Inventor as a single flowering plant from within a population of flowering plants of Yomankato in January, 2001, in a controlled environment in Fort Myers, Florida. The selection of this plant was based on its uniform plant growth habit, good vigor and strong
5 branching habit, numerous inflorescences, desirable inflorescence form and floret colors, fast and uniform flowering response, and good postproduction longevity.

Asexual reproduction of the new Chrysanthemum by vegetative tip cuttings was first conducted in Fort Myers, Florida in April, 2001.
10 Asexual reproduction by cuttings has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The cultivar Yellow Yomankato has not been observed under all
15 possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength, and/or light level, without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Yellow Yomankato'.

These characteristics in combination distinguish 'Yellow Yomankato' as a new and distinct Chrysanthemum:

1. Uniform and outwardly spreading plant habit.
2. Strong and freely branching growth habit.
- 5 3. Dark green-colored foliage.
4. Uniform flowering response and habit.
5. Can be grown as a disbud or spray-type.
6. Early flowering, eight week response time.
7. Anemone-type inflorescences.
- 10 8. Bright yellow-colored ray florets and enlarged yellow green to bright yellow-colored disc florets.
9. Good postproduction longevity with plants maintaining good substance and color for about three to four weeks in an interior environment.
- 15 Plants of the new Chrysanthemum are most similar to plants of the parent, the cultivar Yomankato. Plants of the new Chrysanthemum differ from plants of the cultivar Yomankato primarily in ray floret coloration as plants of the cultivar Yomankato have white-colored ray florets. In addition, plants of the new Chrysanthemum flower about one
- 20 day later than plants of the cultivar Yomankato.

Plants of the new Chrysanthemum can be compared to plants of the cultivar Yobutterfield, disclosed in U.S. Plant Patent number 12,227. In side-by-side comparisons conducted in Fort Myers, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Yobutterfield in the following characteristics:

1. Plants of the new Chrysanthemum were more outwardly spreading than plants of the cultivar Yobutterfield.
2. Plants of the new Chrysanthemum had anemone-type inflorescences whereas plants of the cultivar Yobutterfield had daisy-type inflorescences.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new Chrysanthemum showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ from the color values cited in the detailed botanical description which accurately describe the colors of the new Chrysanthemum. The photograph on the first sheet comprises a side perspective view of typical flowering plants of 'Yellow Yomankato' grown as a disbud-type. The photograph on the second sheet comprises a side perspective view of typical flowering plants of

‘Yellow Yomankato’ grown as a spray-type. The photograph on the third sheet comprises a close-up view of typical inflorescences of ‘Yellow Yomankato’ grown as a disbud-type. The photograph on the fourth sheet comprises a close-up view of typical inflorescences of
5 ‘Yellow Yomankato’ grown as a spray-type.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The
10 aforementioned photographs, following observations and measurements describe plants grown and flowered during the winter in Salinas, California, in a fiberglass-covered greenhouse and under conditions which approximate those generally used in commercial potted Chrysanthemum production. During the production of these plants, the
15 following conditions were measured: day temperatures, 21 to 27°C; night temperatures, 17 to 19°C; and light levels, 5,000 to 6,000 foot-candles. Four unrooted cuttings were directly stuck in 15-cm containers, exposed to long day/short night conditions, and pinched once about two weeks later. At the time of the pinch, the photoinductive short day/long
20 night treatments were initiated. Plants used for the description were

BERGMAN, Wendy R.

grown as disbud-types. Measurements and numerical values represent averages of typical flowering plants.

BOTANICAL CLASSIFICATION:

Chrysanthemum X morifolium cultivar Yellow Yomankato.

5 COMMERCIAL CLASSIFICATION:

Anemone-type potted Chrysanthemum.

PARENTAGE:

Naturally-occurring whole plant mutation of the *Chrysanthemum X morifolium* cultivar Yomankato, disclosed in U.S. Plant Patent
10 number 13,057.

PROPAGATION:

Type: Terminal tip cuttings.

Time to initiate roots: About four days at 21°C.

Time to produce a rooted cutting: About ten days at 21°C.

15 Root description: White, close to 155D; fibrous.

Rooting habit: Freely branching.

PLANT DESCRIPTION:

Appearance: Herbaceous anemone-type potted Chrysanthemum
that can be grown as a natural spray or as a disbud-type. Upright
20 with lateral branches outwardly spreading; uniformly mounded

crown. Strong and freely branching growth habit; about three or four lateral branches develop after removal of terminal apex (pinching); dense and full plants.

Plant height: About 33 cm.

5 Plant width: About 38 cm.

Lateral branches:

Length: About 25 cm.

Diameter: About 4 mm.

Internode length: About 1.4 cm.

10 Strength: Strong.

Texture: Pubescent.

Color: Close to 146A.

Foliage description:

Arrangement: Alternate; simple.

15 Length: About 7.2 cm.

Width: About 4.5 cm.

Apex: Mucronate.

Base: Truncate.

20 Margin: Palmately lobed, sinuses between lateral lobes mostly convergent.

Texture, upper and lower surfaces: Pubescent.

Color:

- Developing foliage, upper surface: Darker than 147A.
- 5 Developing foliage, lower surface: Darker than 147B.
- Fully expanded foliage, upper surface: Close to 147A.
- Fully expanded foliage, lower surface: Close to 10 147B.
- Venation, upper surface: Close to 147A.
- Venation, lower surface: Close to 147B.
- Petiole length: About 2.3 cm.
- Petiole diameter: About 3 mm.
- 15 Petiole color, upper surface: Close to 146A.
- Petiole color, lower surface: Close to 146B to 146C.

INFLORESCENCE DESCRIPTION:

- Appearance: Anemone-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets develop acropetally on a
- 20

capitulum. Inflorescences not fragrant. Plants can be grown as spray or as disbud-types.

5 Flowering response: Under natural conditions, plants flower in the autumn/winter in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Early flowering; plants exposed to two weeks of long day/short night conditions followed by photoinductive short day/long night conditions flower about eight weeks later.

10 Postproduction longevity: Inflorescences maintain good color and substance for about three to four weeks in an interior environment.

Quantity of inflorescences: Grown as a disbud-type, only one inflorescence develops per lateral branch.

15 Inflorescence bud:

Height: About 6 mm.

Diameter: About 9 mm.

Shape: Oblate.

Color: Close to 146A.

20 Inflorescence diameter: About 7.75 cm.

BERGMAN, Wendy R.

Inflorescence depth (height): About 2.4 cm.

Diameter of disc: About 3.7 cm.

Receptacle diameter: About 7 mm.

Ray florets:

5 Shape: Elongated oblong.

Orientation: Initially upright, then perpendicular to the peduncle and eventually reflexing.

Aspect: Straight to arching; mostly flat.

Length: About 3.8 cm.

10 Corolla tube length: About 5 mm.

Width: About 9 mm.

Apex: Emarginate.

Base: Fused into a corolla tube.

Margin: Entire.

15 Texture: Smooth, glabrous, satiny.

Number of ray florets per inflorescence: About 22 arranged in a single whorl.

Color:

When opening and fully opened, upper surface:

20 Close to 9A.

BERGMAN, Wendy R.

When opening and fully opened, lower surface:

Close to 9C.

Disc florets:

Arrangement: Massed at center of receptacle.

5 Shape: Tubular, enlarged.

Apex: Five-pointed.

Length: About 1.6 cm.

Diameter, apex: About 5.5 mm.

Diameter, base: About 2 mm.

10 Number of disc florets per inflorescence: About 175.

Color:

Immature: Close to 144A.

Mature, tube and throat: 9A to 12A; towards the
base, close to 146C.

15 Phyllaries:

Quantity per inflorescence: About 20.

Length: About 7.5 mm.

Width: About 4 mm.

Shape: Deltoid.

20 Apex: Acute.

BERGMAN, Wendy R.

Base: Truncate.

Margin: Entire.

Texture, upper surface: Waxy, smooth.

Texture, lower surface: Pubescent.

5 Color, upper surface: Close to 146A to 146B.

Color, lower surface: Close to 146A.

Reproductive organs:

Androecium: Present on disc florets only.

Anther color: Close to 12A.

10 Pollen amount: None observed.

Gynoecium: Present on both ray and disc florets.

Style color: Close to 144B to 144C.

Stigma color: Close to 9A.

Seed/fruit: Seed and fruit production has not been observed.

15 DISEASE/PEST RESISTANCE:

Resistance to pathogens and pests common to Chrysanthemums has not been observed on plants grown under commercial greenhouse conditions.